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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/623,474	09/13/2000	Masamoto Uenishi	197173US0PCT	2043

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EXAMINER

CHANG, VICTOR S

ART UNIT

PAPER NUMBER

1771

DATE MAILED: 08/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action**

Application No.

09/623,474

Applicant(s)

UENISHI ET AL.

Examiner

Victor S Chang

Art Unit

1771

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 07 July 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY** [check either a) or b)]

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  
ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.  
2. ☐ The proposed amendment(s) will not be entered because:  
(a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ they raise the issue of new matter (see Note below);  
(c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_

3. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: see attached NOTE.  
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.  
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

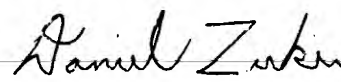
Claim(s) allowed: \_\_\_\_\_

Claim(s) objected to: \_\_\_\_\_

Claim(s) rejected: 1,3-8 and 11-17.Claim(s) withdrawn from consideration: 9.

8. ☐ The proposed drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.  
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_.  
10. ☐ Other: \_\_\_\_\_

DANIEL ZIRKER  
PRIMARY EXAMINER:  
GROUP 1300-  
1700



**NOTE**

1. The Examiner has carefully considered Applicant's amendments and remarks filed on 7/7/2003. For purposes of Appeal, Applicant's proposed amendment to claim 1 has been entered.
2. With respect to Applicants' argument that "there is no teaching or suggestion in EP 0 740 952 to produce a three layer hollow fiber membrane which has an overall porosity of not less than 75% by volume" (Response, page 3, top paragraph), the Examiner repeats (see Paper No. 10, page 3) that in Table 1 (page 13) EP '952 shows that the porosity of the membrane is in the range of 64-76%, and Applicants appear to be arguing the cited references individually. The Examiner reiterates (see Paper No. 7, page<sup>S</sup> 3-4, bridging paragraph) that JP '330 teaches a 3-layer composite membrane with an intermediate separation layer A and two reinforcing layers B. The void ratio of layers B is 30-90% and the mean pore size is 0.01 – 0.5 mm (Abstract). As such, in the absence of unexpected results, it would have been obvious to one of ordinary skill in the art to modify the EP '952 to make a 3-layer composite membrane with an overall void volume of the membrane to be at least 75%, motivated by the desire to have a suitable filtration flow rate. It should be noted that EP '952 shows that even with its 2-layer composite membrane, the porosity of the membrane is up to 76%, a modified 3-layer would be expected to also have its porosity at least up to 76%, since the additional layer (layer B) is generally the more porous reinforcing layer, as taught by JP '330.
3. With respect to Applicants' argument that "EP 0 740 952 neither teaches nor suggests an isothermal crystallization time for the resins" and "the Examiner's

Art Unit: 1771

interpretation of the teachings of EP 0 740 952 is an impermissible reconstruction of the prior art in light of Applicants' disclosure" (Response, page 3 bottom paragraph), the Examiner repeats (see Paper No. 7, page 4) that although EP '952 does not teach the ratio of the isothermal crystallization time, however, it is noticed that the method of making the membrane by the instant claimed invention is essentially the same as EP '952, therefore it is believed that selecting a suitable ratio of the isothermal crystallization time between the layers are either inherent physical properties of the polyolefins required by the membrane manufacturing process, or an obvious optimization to one of ordinary skill in the art, motivated by the desire to form suitable size of the lamella crystals and hence the proper size of the micropores in each layers. Applicant must show that the resultant article is patentably distinct from those taught by the reference.

4. With respect to Applicants' contention that the 3-layer composite hollow fiber membranes having a porosity of not less than 75% by volume has a superior results over the 2-layer membranes (Response, page 4, first full paragraph), the Examiner notes that while the results demonstrated the superior performance of 3-layer over 2-layer membrane, it is irrelevant to the 3-layer membrane based on the teachings of the prior combination, as set forth above.